

NORTHWEST MONTANA WETLAND MANAGEMENT DISTRICT

Kalispell, Montana

and

Moiese, Montana

ANNUAL NARRATIVE REPORT

Calendar Year 1992

U.S. Department of Interior

Fish & Wildlife Service

National Wildlife Refuge System

REVIEW AND APPROVALS

NORTHWEST MONTANA WETLAND MANAGEMENT DISTRICT

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and

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ANNUAL NARRATIVE REPORT

Calendar Year 1992

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INTRODUCTION

Waterfowl Production Areas of the Northwest Montana Wetland Management District are located in Lake and Flathead Counties in northwestern Montana. The Wetland District is a satellite unit of the National Bison Range.

Lake County WPA's are located 3-to-9 miles north and northeast of the National Bison Range. The 8 WPA units, Duck Haven, Herak, Kickinghorse, Montgomery, Sandsmark, Johnson, Johnson 80, and Anderson total 3,063 acres. They are located in an area of glacial and lake bed soil deposits and are part of an area of dense glacial kettles which were formed during the Wisconsin period of glaciation. Lake County WPA's have been administered from the National Bison Range since the first acquisition in 1974.

Flathead County units total 4,458 acres and include Batavia, Flathead, Smith Lake, and Blasdel WPA's.

Flathead WPA (2,370 acres) consists of 7 miles of lake shoreline and upland along the north end of Flathead Lake, including remnants of "delta" islands at the mouth of the Flathead River.

Batavia and Smith Lake WPA's are located in the Smith Valley, 4 and 10 miles respectively, west-southwest of Kalispell. The 535 acre Blasdel WPA is located approximately 1½ miles north of Flathead Lake in what is known as the "lower valley" area of Flathead County.

Flathead County WPA's are administered as satellite units by the on-site Refuge Manager, who is headquartered at the Creston Fish and Wildlife Center, Creston, Montana (Section E.1).

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A. HIGHLIGHTS

Flathead County

Yearly precipitation was 11 percent above the 30-year average (Section B).

Mitigation programs involving wetland acquisition and enhancement continued to be bogged down in the political process (Section C.1).

Preliminary work began on several Private Lands projects (Section F.2).

Lake County

The Five Valleys Wetland Conservation Project was accepted into the Prairie Pothole Joint Venture by the National Steering Committee (Section D.2).

Breeding populations and nesting success of ducks and other ground nesting birds reached new highs in the Ninepipe skunk removal area due to skunk control since 1988. Production was likely the highest since the late 1930's (Sections G.5 and F.3).

The Partners for Wildlife Program expanded and 92 acres of wetlands were restored/enhanced on private lands along with 12 acres on Service lands (Section G.2).

B. CLIMATIC CONDITIONS

Flathead County

Variable monthly rainfall amounts, several record high and low temperatures, August snow and an 11 percent increase in yearly precipitation highlighted climatic conditions in Flathead County this year.

Total precipitation was 17.14", 1.21" above the 30-year-average. Above-average precipitation fell in 7 of the 12 months. The 3.65" received in June and 2.37" in July accounted for 35 percent of the year's total; this was followed by less than half of monthly normal precipitation in August, (.71").

Temperatures were generally average throughout the year. A record high of 65° was recorded on several days in March making the month the warmest March in 82 years. Warm temperatures continued in April and May resulting in decreases up to 39 percent in surrounding mountain snowpack. Mountain runoff was approximately six weeks ahead of normal this year and local forecasters were predicting a potentially dangerous fire season due to the warm temperatures; however, this was alleviated with June and July's precipitation levels. A near record low of 29° in August resulted in early valley frosts and several inches of mountain snow. Record lows were recorded in September when the temperature dropped to 27° on the 7th. The year ended with over half of the year's total snowfall coming in December, and temperatures as low as -6°.

Flathead County wetland units thawed in late March. Freeze-up occurred on November 24 when temperatures dropped to 3°. At year's end, upland units were covered with 25-30" of snow.

Table I. 1992 Climatic Data, Flathead County WPA's*

MONTH	TEMPERATURE		PRECIP.-INCHES		SNOWFALL-1992 INCHES
	HIGH	LOW	1992	30-YR AVG.	
January	48	10	1.17	1.38	10.6
February	52	17	.79	1.01	4.4
March	65	21	.94	.97	Trace
April	74	31	1.02	.97	
May	82	26	1.18	1.67	
June	92	34	3.65	2.14	
July	91	40	2.37	1.07	
August	96	29	.71	1.15	
September	81	27	1.02	1.25	
October	86	20	.71	1.01	Trace
November	50	9	1.59	1.40	7.3
December	43	-6	1.99	1.40	23.1
Totals			17.14	15.42	45.4

* Weather data for Flathead County WPA's is recorded at the National Weather Service Office at Glacier Park International Airport, Kalispell, Mt.

Weather conditions for Lake County WPA's were similar to those for the National Bison Range which can be found in that report.

C. LAND ACQUISITION

1. Fee Title

In February, we received word that a 3-acre upland round-out on Smith Lake was finalized. Acquisition of this tract was "in the mill" for over a year and was made possible because of the landowner's patience and insistence that it be sold to the FWS, despite private offers of over \$5,000/acre. The acquisition dollars came from a joint effort of the FWS, Ducks Unlimited and the Kalispell Chapter of Pheasants Forever. Purchase of the tract completes FWS ownership of the lake's shoreline and eliminates the possibility of residential development.

The potential for acquisition/enhancement of wetlands within the district under the BPA and KERR mitigation programs continued to be hampered this year. More bureaucratic foot-dragging by Advisory Board members, the introduction of unrelated mitigation proposals, and a reluctance by the State to actively meet waterfowl mitigation goals through wetland purchases delayed any potential progress. No acquisitions were made this year despite the fact that an excellent 800+ acre wetland was proposed for purchase.



Figure 1. Purchase of this tract, which lies west of Kalispell, had the support of several local sportsmen's clubs; survey and soil work had been completed by Ducks Unlimited and they had indicated interest in initial diking and water control installation. The tract was never purchased because certain political members of the Mitigation Advisory Board did not approve of land acquisition even though the approved mitigation plans require acquisition/enhancement. They effectively delayed acquisition by political foot-dragging and by introducing other unrelated mitigation proposals, i.e., weed control and studies of neotropical birds, neither of which are approved in the mitigation plans. The tract has since been purchased by a developer; the result is obvious: another wetland with high historical waterfowl use and excellent wetland development potential is lost!! RW 4/89

The loss of this wetland complex re-emphasizes how frustrating the entire mitigative process has been over the last 7 years. Despite the fact that we continue to receive calls from willing sellers and the approved mitigation plans call for acquisition/enhancement of over 4,000 acres of wetlands, the State has done nothing to effectively mitigate wetland losses caused by past hydro-electric development here in northwest Montana. Staff members of the Bison Range, Assistant Manager Washtak and FWE personnel located at Creston have spent considerable time attending meetings and submitting proposals, all to no avail. As time goes on, we continue to see more and more development and loss of the wetland base in both Flathead and Lake Counties. Recent national financial publications have listed the Flathead Valley as the #2 real estate investment area in the United States. This will have the obvious effect of more development and higher land prices. As a result, acquisition, enhancement and protection of wetlands via the mitigation process does not appear to be very bright for the wetland resource in the Flathead Valley. In a nutshell: because of bureaucratic bull, the resource loses again!!!

Despite an acute need for land acquisition in the Lake County portion of the WMD, no tracts were purchased. An appraisal was completed on the 240-acre Kermit Anderson tract just west of Duck Haven WPA, but lengthy negotiations over price were ended when 20 acres were subdivided and sold. At year's end, 160 acres were sold to a conservation buyer for nearly twice our appraised value. Sixty acres were still for sale at year's end.

2. Easements

Although this wetland district has no easement program yet, recent acquisition planning has proposed conservation easements to address subdivision threats to the area.



Figure 2. Lands bordering our WPA's are prime real estate if divided into 20 acre tracts. The typical new buyer is from out of state, wants land next to a wildlife area or other public land. They bring marauding dogs and cats, more barbed wire fence, septic lines into wetlands, weeds and land tracts that are too small for viable farm or ranch operations. The new house they build makes it impossible to restore the area back to wildlife habitat. All this up next to WPA's with nest densities approaching 1 per acre on uplands with 75 percent Mayfield success rates.

D. PLANNING

2. Management Plan

This refuge and the Montana Cooperative Wildlife Research Unit co-authored a project prospectus under the Prairie Pothole Joint Venture of the North American Waterfowl Management Plan. It is titled the Five Valleys Wetland Conservation Project. It was accepted as a PPJV project by the Joint Venture Management Board and the Steering Committee. Proposed actions are conservation easements to reduce subdivision of private lands, fee acquisition to

remedy fragmentation problems around existing public lands, reintroduction of extirpated wildlife species, private land habitat improvements and restoration of native plant communities. Proposed developments on private land include restoration of drained wetlands and better grazing management. The five valleys include the Flathead, Bitterroot, Blackfoot, Clark Fork and Swan.

4. Compliance with Environmental & Cultural Resource Mandates

In June, Rhoda Lewis, Regional Archeologist completed an archeological evaluation of the historic Blasdel barn.



Figure 3. The Blasdel barn was part of the WPA acquisition in 1988. In 1988 the Montana SHPO determined the site eligible for nomination to the National Register of Historic Places based on architectural design. Rhoda's recommendations included: let it deteriorate; demolish it, or divest our selves of it. No action has been taken to list the barn or divest it because of costs. We have not attempted to destroy the barn because of local public outcry. We intend to let the barn stand and deteriorate naturally. RW 5/88

We continue to contact The Confederated Salish & Kootenai Tribes prior to wetland enhancement work on private lands on the Flathead Reservation. Their Shoreline Protection Division reviewed 57 wetland projects on 21 properties this year. Projects included ditch plugs and low level dikes that were proposed by the Montana Partners for Wildlife Office of FWS. All projects were approved. The Tribes "Aquatic Lands Conservation Ordinance" (ALCO) is similar to the U.S. Army Corps of Engineers' 404 permit process. For more information on wetland restorations see Section F.2.

5. Research and Investigations

Flathead County

In April, FWS biologist Kevin Shelley, (FWE division - Creston) initiated a study to evaluate the biological effectiveness of previously constructed habitat enhancements on the WPA's. The study, funded by the National Environmental Research Council (NERC) involved investigation and monitoring of waterfowl use on the WPA's. Upon completion of the study, which may continue for five years and involve enhancement construction, NERC hopes to be able to formulate an "enhancement guide" for the Flathead Valley. At year's end, no data had been assimilated into report form.

Ninepipe NR-87 - Nest Success of Upland Nesting Ducks in Relation to Predator Removal (61540-41) Kurt Forman, University of Montana.

This was the seventh year of study on Lake County wetlands in a 17-square-mile predator (skunk) removal area. Mr. Forman's graduate studies are a follow-up to earlier studies by Nate Hall. This long-term study was initiated after 3 years of data indicated Mayfield nest success was only 20.7 percent (1986-88). Predator removal was initiated in 1988 and has continued since.

Three nest searches were conducted between April 14 and June 26, 1992 on 976 acres within the skunk removal area surrounding Ninepipe NWR. There were 247 acres searched during the same period at the Pablo National Wildlife Refuge (the non-removal area). Skunk captures continued to decline with 17 removed between 22 March and 8 June, 1992. This compared with 1988 (N=109), 1989 (N=77), 1990 (N=32) and 1991 (N=26). The decline in captured skunks has occurred despite relatively constant trapping efforts from year to year. This decline is due to the cumulative effects of multi-year trapping, the large block of land involved (17 square miles) and to passive skunk control measures.

Passive measures include covering old culverts with bars and removing rock piles and old buildings. Outside the study area, 1992 skunk populations remained high at Pablo NWR and other areas of the Flathead Valley.



Figure 4. Passive measures implemented to control skunks included placing bars over culverts to exclude these areas from winter use. About 100 culverts have been covered.

Scent stations were again used to survey predator community composition and relative abundance in both the removal and non-removal areas. In the past two years, skunk visits to the stations were significantly lower in the Ninepipe area than at Pablo.

In the skunk removal area, Mayfield nest success was 61.9 percent, $N=524$ nests (95 percent CI 56.7-67.6 percent). This was significantly greater ($Z = 2.46$, $P<0.05$) than the Mayfield of 25.0 percent (95 percent CI 11.8-51.9 percent) observed from a 36-nest sample at Pablo NWR. Nest densities were .6 per acre for all lands in the removal area and nearly 1 nest per acre on WPA's. Mallard nests were 47 percent of the total.



Figure 5. Scent station surveys indicated skunk numbers were much lower at Ninepipe than at Pablo NWR or other areas lacking skunk control. Nest success for all ground nesting birds was significantly higher in this same area.

NWMTWMD-NR-91 - Effects of Nest Predators on Ground-nesting Bird Communities in Northwest Montana. William Swaney, University of Montana.

This was the second year of study relating nest success of ground nesting non-game birds to the removal of skunks. This study is a companion to the research described above. The objectives were:

1. Describe the distribution, abundance, and species composition of nesting bird communities relative to habitat type and cover density and
2. Quantify nest success of the most common non-waterfowl bird species in relation to habitat quality and predator populations.

In the Ninepipe skunk removal area, (976 acres searched) Mr. Swaney found 111 nests including 57 short-eared owls, 19 western meadowlarks, 12 northern harriers, 10 ring-necked pheasants, 6 common snipe, 3 killdeer, 2 Wilson's phalaropes, 1 American bittern, and 1 sora. At Pablo NWR (247 acres searched) there were 12 nests including 5 ring-necked pheasants, 3 western meadowlarks, 1 short-eared owl, 1 northern harrier, 1 savannah sparrow and 1 sora.

For the 2-year study, apparent nest success for 44 owl nests was 75 percent (50.3 percent Mayfield); for 12 meadowlark nests was 74.2 percent (57.2 percent Mayfield); for 12 northern harrier nests was 76.9 percent (68.9 percent Mayfield); and for 12 common snipe nests was 83.3 percent (71.3 percent Mayfield). Apparent success rates were much lower for Wilson's phalaropes and killdeer at 42.8 percent and 33.3 percent respectively. In 1992, Mr. Swaney recorded all species of birds flushing from the cable during nest searches, regardless of whether the nest was located. This recording was done during the third nest search of the year, and indicated many more pheasant broods than what pheasant nest numbers would indicate. In the Ninepipe area there were 42 brood flushes and 31 individual pheasant flushes. There were also 10 sparrows (either vesper, savannah, or grasshopper), 1 gray partridge, 1 avocet brood, 1 killdeer brood, and 1 phalarope brood. At Pablo there were 2 pheasant broods and 1 gray partridge brood, 1 pheasant, 1 gray partridge, 14 sora, and 14 vesper, savannah, or grasshopper sparrows.

These numbers from flush counts indicate that more birds were nesting than the conventional nest search methods indicated. Intensive searches on foot using rope drags and several observers or some other methods are needed to monitor these non-waterfowl species. Regardless, it appears that ground nesting species within the skunk removal area are much more successful than similar species in the control area (Pablo NWR).

6. Other

In November, all cooperative fire agreements for WPA's in Flathead County were renewed for another 5 year period. After lengthy discussions with the local volunteer fire departments, minor changes were made and new signature pages were completed.

E. ADMINISTRATION

1. Personnel

All WMD personnel, with the exception of Assistant Manager Washtak and north valley seasonal employees, are headquartered at the National Bison Range. For a complete summary of personnel status and staff photo see the NBR Narrative.

Administration, operation, and maintenance of Lake County WPA's is the responsibility of personnel at the National Bison Range.

On-site management and administration of WPA's in Flathead County is the responsibility of the Assistant Manager, who is headquartered at the Creston Fish and Wildlife Center. The Center is located approximately 15 miles east of Kalispell and 71 miles north of the Bison Range. The Fish and Wildlife Center is the only FWS facility in Flathead County. Several other FWS divisions, including Fish and Wildlife Enhancement, Fish and Wildlife Management Assistance, and Hatcheries are also headquartered at the Center.



Figure 6. Ray Washtak, on-site Assistant Manager for Flathead County WPA's. LL 12/21/92

On March 22, Paul Gelhar EOD as a Biological Aid (Wildlife) to assist with WMD and Refuge operations in Flathead County.



Figure 7. Biological Aid Paul Gelhar. This was Paul's third summer assisting with north valley WMD/Refuge operations. His previous experience included one summer as a Range Aid at CMR Refuge and seasonal experience with the Minnesota Department of Natural Resources. RW 6/1/92

In August, Paul received an "on-the-spot" special achievement award for his performance during the summer absence of Assistant Manager Washtak.



Figure 8. Paul Gelhar received his special achievement award for his performance in "holding down the fort" during the Assistant Manager's absence. Paul got a rapid introduction to "the telephone", and the various administrative and clerical duties usually handled by the Assistant Manager. He handled these additional responsibilities well in conjunction with numerous on-going field activities. JM 8/92

Daily clerical support for the WMD operations in Flathead County is provided by the Fish and Wildlife Center's Office Assistant and Clerk Typist. Office space and clerical assistance at Creston is provided on a cooperative reimbursable basis. The Office Assistant at the Bison Range provides budget tracking and other administrative assistance.

2. Youth Programs

There were five YCC's and one Montana Human Resource youth employed at the National Bison Range. The Bison Range Narrative describes most of their work, but these young people did complete several projects on WPA's. Projects included removal of 2 1/4 miles of old interior fence at Johnson WPA and removal of several truck loads of old junk and trash prior to burying two old farm dumps. They also helped erect and take down temporary electric fence on WPA habitat units.

4. Volunteers

Rita Gelhar, Anthony Gelhar, and Jennifer Washtak volunteered approximately 100 hours assisting with north valley work projects including nest dragging and fencing.

In February, three members of Flathead Wildlife, Inc. spent 4 days repairing and installing nesting material in goose structures on the WPA's in Flathead County.

In July, Justin Paugh completed inventory of bluebird boxes on the local "bluebird trail" in Flathead County. Part of Justin's inventory included nest boxes along the boundary of Smith Lake and Batavia WPA.

In August, the Flathead Chapter of the National Audubon Society volunteered 80 man hours of pulling and digging purple loosestrife in Lake County wetlands. The Flathead Resource Organization volunteered 20 hours to similar activities at other sites in the Mission Valley.



Figure 9. For the past 5 years, various conservation groups have formed pulling parties to help with Lake County efforts to control Purple Loosestrife. The 1992 party, organized by the Flathead Chapter of the National Audubon Society, was the biggest yet, with 21 people spending an August day in the marsh. Five wetlands were carefully scoured.

5. Funding

Operational funding for the entire Wetland District is included in the annual appropriation of the National Bison Range Complex. Funding for WPA's in Flathead County and the Swan River NWR is broken down separately based on annual work plan requests submitted by the Assistant Manager at Creston. For FY 92, north valley O & M expenditures totalled \$69,200, a 6 percent increase from FY 91 figures. A target of \$73,100 has been allocated for FY93. Table II summarizes past funding for the north valley program.

Table II. Annual Appropriations, Flathead County WPA's and Swan River National Wildlife Refuge

FY	O & M	ADDITIONAL FUNDING
89	68,100	
90	63,500	
91	65,100	\$18,400 (Maint. 1262 funds)
92	69,200	
93	73,100	

6. Safety

North valley Refuge personnel attended safety meetings when conducted at the Fisheries Center. Rabies antibody booster shots were received in April by personnel involved in predator control operations. In addition, all refuge fire extinguishers were serviced as needed; a sectional aviation hazard map was completed for low level flight operations; step tests were taken; lyme disease baseline testing was completed; and a headache rack was installed on the 1987 Chevy 4X4 for added protection during summer field activities.

Staff members stationed at the National Bison Range attended routine safety meetings. See the Bison Range Narrative for details.

7. Technical Assistance

Ray Washtak and Paul Gelhar completed mourning dove surveys in Flathead and Lincoln Counties. As in past years, few doves were observed due to very cool weather.

Lynn Clark of National Bison Range Staff completed the St. Regis Breeding Bird Survey in Sanders County and the mourning dove survey in Sanders County. Lynn also judged the Lake County 4-H Fair categories in wildlife, forestry, and entomology.

8. Other

Meetings and/or training attended this year included:

R. Washtak, and B. West:

Coordination, planning, and advisory board meetings with BPA, FWS, MDFWP, Forest Service biologists and other special interest groups concerning BPA/Kerr mitigation. Mid-year and end-of-year Project Leader's meeting and annual work plan meetings; annual L.E. Re-certification, Marana, Arizona.

J. Malcolm, B. West, R. Washtak:

Federal Employee Retirement training, Missoula and Great Falls.

F. HABITAT MANAGEMENT

2. Wetlands

Flathead County

Lack of normal snow depths in surrounding mountain drainages, and above average temperatures during March, April and May left spring wetland water levels well below normal. Smith Lake WPA experienced its driest spring in 7 years. Reed canary grass meadows supported only about 25 percent of normal pair habitat. Water levels on Blasdel WPA were also at an all time low. Only our recharge capabilities on Batavia kept that WPA from drying up. Rainfall in June and July did little to improve wetland levels. Precipitation amounts were near normal for the rest of the year, subsequently wetland levels did not improve going into the fall months. Snowfall in December totalled 23" giving us what we hope is a good start heading into 1993.

On several occasions, Assistant Manager Washtak met with private landowners to discuss wetland development opportunities under the Private Lands Program. Dean Vaughan, Private Lands Technician at the Bison Range and Greg Neudecker, Benton Lake NWR assisted and eventually took the lead in formalizing specific projects. In Flathead County, two projects were investigated. A private, 50-acre wetland near Marion, Montana will involve extensive SCS survey to determine the impact of wetland development on surrounding mountain drainages. Survey work is expected to be completed in early 1993. The second project is in the "Wolf Prairie" area west of Kalispell. After survey and diking, approximately 80 acres of wetlands would be restored. However, the project may be cost prohibitive and a determination will be made in 1993.

Lake County

Water conditions have continued to deteriorate over the past decade and 1992 was the last year for many semi-permanent wetlands. Snow melt hasn't provided much run-off in recent years. Wetlands which haven't been dry since the 1930's were dry. Some Seasonal Type 1 wetlands were available for habitat early in the year but they quickly dried. The only wetlands left by June were those that could be filled with irrigation water.

In May, it was obvious to the nesting study crews that there was going to be a big duck hatch on Lake County WPA's. In preparation for brood rearing needs, water was diverted from the irrigation project to recharge potholes on Sandsmark, Herak and Montgomery WPA's. We routinely divert water during the fall, but this was the first year potholes were filled in May and June. Good brood counts later in the year were evidence that the move was a success.

Although 716 acres of these WPA's are assessed irrigation taxes, we only diverted about 60 acre-feet or 9 percent of our allotment.

The saga of Lake County pothole wetlands being filled with wood chips continued. EPA, FWS and the Confederated Salish & Kootenai Tribes met on site at three different private wetlands filled in recent years. EPA issued cease and desist order letters to all three and ordered all to remove the several hundred yards of wood chip fill or to mitigate for the wetland losses. At year's end two of the three land

owners had tentatively agreed to mitigate. Complaints by the third landowner prompted a congressional inquiry questioning EPA's jurisdiction on isolated wetlands and claiming harassment.

The Montana Partners for Wildlife Program expanded at this station in 1992 and a full-time temporary employee was hired to start the program in Western Montana. Dean Vaughan completed 36 wetland restoration/enhancement projects on private lands in 1992. The work covered 92 acres in 42 different basins. Upland cover projects included providing fencing to exclude grazing from 20 acres adjacent to Ninepipe NWR and securing a lease to prevent grazing on a 160-acre tract of private land at Sloan's Lake west of Ronan.

Wetland restoration work on WPA's included 7 basins totalling 12 wetland acres at Anderson WPA and 3 basins with 5 wetland acres at Johnson WPA.

4. Croplands

Barley plantings on Blasdel WPA were rotated again this year in an effort to reduce noxious weed competition and limit herbicide use. Barley was planted in the east 30-acre field while winter wheat was harvested in the west 30-acre tract. The fields were used by moderate numbers of waterfowl searching for grain stubble. Cropping the two fields also results in "good PR" with local farmers who often complain about depredating waterfowl. Resident populations of pheasants were also observed feeding in the stubble throughout the year.

Five acres of barley were also planted in Unit 8 Blasdel. The entire field was left unharvested as an additional food source for wildlife.

In 1992, 40 acres in the north half of Unit 4 in Blasdel were seeded to DNC.



Figure 10. The north half of Unit 4 on Blasdel was seeded to DNC by force account. The seeder was rented from a local grain company for \$1.00/acre. The local Chapter of Pheasants Forever contributed \$700.00 for the seed. By summer's end we had a "good catch", but Canada thistle remained a problem (despite one year of summer fallow) and the unit may have to be mowed for the next two years to control weed infestations. RW 5/92

In July, the four-row shelterbelt on Blasdel WPA was tilled again by a cooperater to control weed growth.

This was the fourth year of tilling between the rows and we have seen little success in controlling Canada thistle growth. In 1993, we plan on seeding the areas between the rows followed by 2-to-3 years of mowing in an effort to limit the weed growth. In Flathead County, excellent weed control within grass and DNC stands, through the use of mowing and/or haying has been observed over the past several years. We hope to control the thistle growth in the shelterbelt by applying this method of control rather than paying a cooperater to till the area.

Farming on Lake County WPA's included four 20-acre grain plots at Johnson WPA. Two plots were in spring wheat and two were half fallow and half spring wheat. Since there is

very little grain in the vicinity, these plots were put in as a winter food source for waterfowl and upland gamebirds. The plots were used well by pheasants and gray partridge, but there was little use by waterfowl this year.

5. Grasslands

Grassland units on Flathead County WPA's are dominated by reed canary grass, quack grass, Kentucky bluegrass, creeping meadow foxtail, bluebunch wheat grass, basin wild rye, rough fescue, fowl bluegrass, redtop, and DNC with a scattered overstory of rose and snowberry. All upland units are managed to promote optimum nesting opportunities. Management practices include rotational burning, haying, grazing, and control of noxious weeds. Vegetative growth, mulch buildup and subsequent applied management continue to be monitored through photo points and Robel readings taken each spring and fall.

Lake County WPA grasslands are composed primarily of quackgrass, Kentucky bluegrass and DNC plantings. Several older DNC plantings have weed problems with whitetop (Cardaria draba) being especially bad in otherwise healthy fields.

Nesting cover in Lake County recovered well from the recent denuding by high meadow vole populations that crashed in 1991.



Figure 11. Dense nesting cover seeded at Duck Haven WPA with assistance from the Ronan Chapter of Pheasants Forever recovered well after the high meadow vole population crashed early in 1991.

7. Grazing

In 1992, the permittee continued annual shoreline grazing of Unit 8 on Smith Lake. The purpose of the graze was to provide goose browse for broods hatched on the WPA. Approximately 20 AUM's were removed, results were excellent, and the shoreline received considerable use by about 70 goslings.

In September, a grazing permittee was located for Unit 5 on Flathead WPA. This unit lies adjacent to the lake's shoreline and has received considerable goose use by both pairs and broods in past years. In Flathead County, grazing permittees are hard to come by due to long-term, cheap grazing on surrounding Forest Service lands. Intensive, short duration grazing needed on the WPA's usually does not "fit" into local cattle operations. Approximately 79 AUM's were removed and the area should provide excellent goose browse in the spring of 1993.

In Lake County, 80 acres were fall grazed at Duck Haven WPA as part of an Extension Agreement with an adjoining landowner. Under the arrangement, the cooperator will fall graze each of three units once every third year. In exchange, the Service receives the use of 15 acres of private land where a wetland restoration project was done through the Partners for Wildlife Program.

At Johnson WPA, 240 acres of grazing was provided the farming cooperator in return for his work in preparing and planting the wildlife food plots.

8. Haying

Two bids were received this year for the hay units surrounding Smith Lake. Low springtime water levels within the reed canary grass meadows aided permittee efforts this year. Approximately 110 acres were hayed compared to the 40 acres hayed in 1992. The meadows are mowed annually in order to "open up the marsh" and provide additional pair habitat the following spring.

Two bids were also received for hay acreage on Blasdel WPA. Rotational haying allowed for 54 acres of DNC to be cut and swathed. The permittee paid \$17.25/acre. Unit 2, east half of 3, and the south half of Unit 4 were hayed in an effort to stimulate the vegetation, remove the mulch buildup and control noxious weeds.

Haying on Lake County WPA's included 40 acres of alfalfa hayed at Johnson WPA which was provided in return for the cooperator's work in preparing and seeding the food plots mentioned above.

9. Fire Management

No prescribed burns were conducted on Flathead County WPA's this year. In mid-April, Washtak and Gelhar assisted hatchery personnel with a prescribed 10-acre burn at the hatchery complex. The burn was conducted to reduce the wildfire threat and stimulate vegetative growth in decadent grasslands surrounding Jessup Mill Pond.

In April, two small wildfires occurred on Smith Lake WPA, resulting in approximately five acres of reed canary grass burned in Units 1 & 2. In March, another five-acre wildfire occurred in the uplands in Unit 12. Both fires were the result of continued dry weather conditions and careless highway smokers. The Smith Valley Volunteer Fire

Department responded to the early evening fires and quickly extinguished the blazes before any damage was done to government or surrounding private structures.

There were no prescribed burns or wildfires on Lake County WPA's in 1992.

10. Pest Control

Flathead County

Canada thistle remained the most persistent and common noxious weed found on Flathead County WPA's. Infestations were widely scattered throughout the upland units making control difficult. Other noxious weeds included spotted knapweed and musk thistle. Knapweed infestations were found on Batavia, Blasdel, and Flathead. Musk thistle was located in the upland units on Smith Lake and Batavia.

In 1992, in a further effort to curb noxious weed infestations, we submitted a pesticide use proposal for the use of "Curtail", a new herbicide that was being used by the local County Weed Department with excellent success. Herbicides are used only in areas where slope and/or terrain other control efforts. Until this year our herbicide use was limited to 2,4-D, at a rate of .5 lbs. AE/acre. While we obtained adequate control in most units, we were not getting "the kill" we desired, resulting in several applications being necessary. Force account efforts and cooperative work by the Weed Department using Curtail gave us excellent control over 70 percent of areas we spot sprayed. It is hoped that persistent efforts over a period of years and continued success using Curtail will allow for reduced herbicide use in the future. We spent approximately 10 man-days this year spraying noxious weeds. County Weed personnel spent an additional 3 days assisting our efforts.

Noxious weed control is also a goal of rotational haying within upland units. Haying allows for additional control over larger tracts and reduces our dependency on chemicals. We have found that two-to-three year rotational haying within DNC stands, which cannot be sprayed with 2,4-D based chemicals, is giving us excellent control with little regrowth. On Blasdel WPA we hayed 54 acres of DNC with excellent weed control results. In addition, the cooperator on Smith Lake WPA hayed 10 acres of upland and 20 acres of reed canary grass in exchange for his spot spraying efforts (with Curtail) in "hard to reach" areas. This effort saved us time and dollars and still allowed the job to get done. Biological control efforts in Flathead County included continued monitoring of the thistle head weevil (Rynocyllus

conicus). Approximately 800 of the weevils were released in 1978 on Batavia WPA. Excellent results continued in the uplands and the WPA now serves as a source of the weevil for transplantation to other musk thistle infested areas.

Last year's release of knapweed larvae (Urophora affinis and U. quadrifasciata) at Batavia failed. Apparently, adjacent neighbors took our "bouquets" down from the fenceline we had attached them to thinking they were doing us a favor. We never did find the culprit(s) responsible for the heist. In 1993, we may make another attempt at establishing the larvae after we contact surrounding landowners and put out a news release.

In May, we released 100 Trichosirocalus horridus adult insects on four nesting islands at Batavia.



Figure 12. The Trichosirocalus horridus insects prior to their release. Musk thistle infestations on the nesting islands are not extensive but are in need of control to limit potential spread of seed. Rynocyllus weevils have apparently not spread to the islands, resulting in our experimental release of these critters. Their activity will be monitored in 1993. RW 5/92

In 1992, Assistant Manager Washtak assisted County Weed personnel in contacting individuals responsible for growing purple loosestrife at greenhouses and private gardens. Previous efforts made in 1990 resulted in some voluntary compliance, but certain individuals have resisted control efforts. A new State law which lists purple loosestrife as a noxious weed and prohibits propagation has added "teeth" to control efforts in the county. Managers of Conrad Mansion in Kalispell have very reluctantly agreed to stop growing the plant as an ornamental. Other businesses such as Gadiss Gardens insist their loosestrife plants are sterile and have resisted voluntary compliance. Enforcement of the State law is the responsibility of the County Weed Department but service personnel will continue to monitor these situations, because of the grave wetland threat. Currently, there are no known loosestrife infestations in any wetlands in Flathead County.

Efforts to control whitetop, Dalmation toadflax, Canada thistle and spotted knapweed continued on Lake County WPA's. NBR personnel mowed approximately 100 acres of whitetop on Sandsmark, Herak and Duck Haven WPA's. Spraying treatments of weeds on Sandsmark, Montgomery, Herak, Johnson and Kickinghorse WPA's are shown in the following table.

Table III. Herbicide use on Lake County WPA's in 1992

Target Species	Herbicide	Rate*	Acres
Whitetop	2,4 D Ally	1.0 lb. .1 oz.	165
Spotted Knapweed	2,4 D	1.9 lb.	105
Dalmation Toadflax	Tordon	1.0 lb.	63

*Pounds acid equivalent/acre

Although very little of the Lake County infestations were on Service lands, Bill West continued taking the lead on control efforts through the Lake County Purple Loosestrife Control District. Spraying with glyphosate continued as the

primary method of control on approximately 129 sites throughout the County. Hand digging by volunteers was the method of choice on several sites as reported in Section E.4. The control efforts were successful in halting the spread of this wetland weed pending the establishment of biological controls. There were 10 new sites found, but the weed was declared eradicated on 10 of the original sites. Plant density was greatly reduced at a majority of the areas.



Figure 13. Although an aggressive control program has been in effect through cooperative efforts in Lake County, some healthy plants escape control. This one did not escape and was selected as this year's Champion Weed for the NBR Complex. This may be a National Champion unless someone out there can top it.

Additional planning was done to coordinate and obtain support for introduction of bio-controls for loosestrife. An application for State Weed Trust Funds was started in conjunction with the Loosestrife Control District. Rich Maleki of the NYCWRU at Cornell University visited to advise on procedures for establishing insects to control loosestrife.

11. Water Rights

Water rights for Batavia and Smith Lake WPA's were purchased by the FWS from the Ashley Irrigation District in 1981. At that time \$5,000 was paid to acquire 1,445 acre-feet of the waters of Ashley Creek; 745 acre-feet to be diverted for Batavia and 700 acre-feet for Smith Lake WPA. Montana statutes do not recognize a legal right to use water without an artificial diversion from the source; hence, the water right at Smith Lake provides for pumping from Ashley Creek. We did not exercise our right to pump this year despite spring drought conditions because we do not have the means to pump out of the creek. In 1992, 579 acre-feet were diverted from Ashley Creek into the 3 marsh pools on Batavia WPA. Water was diverted to provide for pair and brood habitat. Deteriorated dikes within the WPA continued to cause water retention problems this year. The dikes are in a state of disrepair from age and extensive muskrat activity. Diverted water can be held within the marsh pools only by keeping the stoplogs in the main structure in Ashley Creek. This has the potential to interrupt rainbow trout movement in the creek. In addition, the City of Kalispell requires 15 cfs for proper dilution of sewage at their plant. Because of this, we have to recharge the WPA slowly while trying to maintain 15 cfs of overspill at the control structure. We attempted to recharge the marsh in the fall for waterfowl migrations and hunter use but gave up because of these two problems. We need some construction bucks to make the best use of diverted water and to manage this WPA correctly!

The Fish and Wildlife Service is assessed a yearly fee for irrigation water and ditch maintenance by the Flathead Irrigation Project, regardless of the amount of water used. Water releases and diversions are made by personnel of the Project. This year's assessment totaled \$14,732.12, or \$20.55 per acre of assessed land under the project. There are 716.89 acres assessed on FWS lands. Each acre was allotted .5 foot of water in 1992.

G. WILDLIFE

2. Endangered and Threatened Species

In 1992, bald eagles continued to use the WPA's in Flathead County as nesting and loafing sites. Bald eagles were observed on nearly every visit to Flathead WPA. In cooperation with the State, we again completed the bald eagle survey in June of this year. Survey results indicated that five eaglets were hatched and fledged on the WPA.

Use of the WPA by migrating and/or transient bald eagles continued in 1992 with several other adults observed on numerous occasions. In early November, three adults and four immature bald eagles were observed on Flathead WPA; these birds did not appear to be associated with the nesting pairs. On other occasions during the year, several "transient" eagles were often observed near the mouth of the Flathead River. These birds appeared to be using the "snags" along the WPA shoreline as occasional resting and loafing sites.

In Lake County, we cooperated with the Confederated Salish and Kootenai Tribes and the Peregrine Fund by providing an open, treeless, grassland hack site free of great horned owls at Johnson WPA. Personnel of the Fund released 10 peregrines at the site in late August. Site attendants reported two of the birds disappeared immediately, but the remainder were cared for until fall. An additional release is scheduled for 1993.



Figure 14. Gary and Jean Rousa were the volunteer attendants at the open grassland, peregrine falcon hack site on Johnson WPA.

3. Waterfowl

Geese

The 1992 Canada goose aerial pair counts on Flathead County WPA's revealed a total of 92 pairs, an increase of 59 percent from 1991 figures. Brood counts conducted in early June indicated 151 goslings were produced on the 4 WPA's. This figure represents a 32 percent decrease from last year's estimates. We may have missed some birds on the count. In addition, this year's hatch was several weeks earlier than normal and observers had a difficult time determining more mature (larger) goslings from adults.

Table IV. Canada Goose Production, Flathead County
WPA's, 1992

Unit	Number of Pairs Observed	Number of Goslings Observed
Batavia	16	0
Smith Lake	30	51
Flathead	34	86*
Blasdel	12	14

* Estimated production; broods often move to the WPA from the Flathead River in search of loafing and feeding sites.

The valley-wide aerial census revealed 992 breeding pairs of Canada geese, up 14.2 percent from 1991. However, the number of pairs increased 24 percent when compared with the 11-year average. The valley-wide aerial brood count tallied 1,566 young, up 2 percent from last year.

In Flathead County, duck pair habitat was poor throughout the months of April and May, due to a 15 percent decrease in average precipitation the first 5 months of the year. Lack of normal snowfall and lack of runoff in the north end of the valley through March resulted in low water levels throughout the county. Aerial surveys in April indicated all permanent and semi-permanent basins were extremely low or dry. By early May, it was obvious that pair habitat would be at an all time low. The poor habitat conditions resulted in an 18 percent decrease in duck pairs from 1991.

Nest searches at Blasdel WPA indicated that nest success, as well as the breeding population, was down from 1991. Observed nest success was only 17 percent, compared to 39 percent in 1991. Duck production on Flathead County WPA's was calculated using a hen productivity rate of .25, based on the nesting data from Blasdel. Using this productivity rate, an average brood size of 4.7 and a brood survival rate of .7, estimated production for 1992 came to 416, a 52 percent decrease from last year's estimates.

Pair count data and production estimates for Flathead County units are summarized in Table V.

Table V. 1992 Duck Breeding Pair Counts and Estimated Production for Flathead County WPA's

Species	# Pairs	Production
<u>*Flathead WPA</u>		
Mallard	20	16
Blue-winged teal	1	1
Shoveler	1	1
Common merganser	2	2
* subtotal *	24	20
<u>*Batavia WPA</u>		
Mallard	40	33
Blue-winged teal	34	28
Shoveler	9	9
Redhead	1	1
Ring-necked duck	1	1
Ruddy duck	2	2
* subtotal *	87	74
<u>*Smith Lake WPA</u>		
Gadwall	1	1
Pintail	1	1
Blue-winged teal	83	68
Wigeon	12	12
Shoveler	2	2
Redhead	82	67
Canvasback	7	6
Lesser scaup	7	6
Ruddy duck	5	4
Mallard	97	80
Common goldeneye	5	4
Common merganser	3	2
Wood duck	3	2
* subtotal *	308	255

Table V. 1992 Duck Breeding Pair Counts and Estimated Production for Flathead County WPA's (cont.)

Species	# Pairs	Production
<u>*Blasdel WPA</u>		
Gadwall	7	6
Pintail	6	5
Blue-winged teal	5	4
Shoveler	17	14
Redhead	2	2
Lesser scaup	13	11
Common goldeneye	3	2
Bufflehead	5	4
Ruddy duck	14	12
Mallard	8	7
* subtotal *	80	67
*** Total ***	499	416

We continued to monitor waterfowl populations on all WPA's by aerial census flights and random ground counts done in conjunction with on-going work programs. Spring waterfowl populations on WPA's peaked in March when nearly 7,500 birds were observed.

Fall waterfowl populations peaked in late September when an estimated 22,000 ducks, geese, and swans were observed. The majority of these birds stayed in the area until late November when freeze-up drove the birds south for the winter. However, hardy populations of mallards and Canada geese continued to use the Flathead River and warm water sloughs despite December's cold temperatures and heavy snowfall. Total waterfowl-use-days for the district were estimated at 2,250,000, 29 percent above last year's estimates. Waterfowl population peaks are summarized in Tables VI and VII.

Table VI. Peak Waterfowl Populations, Spring Migrations

	1986	1987	1988	1989	1990	1991	1992
Swans	1,300	650	250	500	250	600	100
Canada Geese	1,850	500	750	600	250	1,200	1,150
Ducks *	2,635	4,935	7,480	5,200	18,300	9,350	6,045

Table VII. Peak Waterfowl Populations, Fall Migrations

	1986	1987	1988	1989	1990	1991	1992
Swans	91	115	140	125	350	250	150
Canada Geese	350	370	2,100	1,000	2,500	2,500	1,300
Ducks*	12,934	24,466	21,900	20,300	34,550	24,575	20,550

*Coot numbers are included.

Duck breeding pair counts on Lake County WPA's revealed a 6 percent increase in breeding pairs, with 726 pairs counted compared to 683 pairs in 1991. Mallards comprised 38 percent of the breeding pairs, with cinnamon teal making up 18 percent, gadwall at 13 percent and redheads comprised 9 percent. Nest monitoring as part of long-term studies by MTCWRU indicated a Mayfield nest success of 73.2 percent on Sandsmark, Herak and Montgomery WPA's. Average Mayfield success in the skunk removal area, which included those three WPA's and State Game Management Area lands was 64 percent.

Estimated duck production for Lake County WPA's was calculated using a hen productivity rate of .70 based on nest success from nest monitoring on a portion of the WPA's. An average brood size of 5.4 was derived from the brood index counts, and we used an estimated .70 survival from the count average to flight stage. Estimated production of 1,920 ducks was up 99 percent from 1991, and was the highest on record in the past 11 years. Duck production in the skunk removal area around Ninepipe NWR was quite likely the highest since the high levels documented by Girard in the late 1930's when extensive predator control was in effect.

Table VIII. 1992 Duck breeding pair counts and estimated production for Lake County WPA's

Species	# Pairs	Production
<u>*Montgomery WPA</u>		
Mallard	17	45
Shoveler	5	13
Gadwall	11	29
Cinnamon teal	11	29
Redhead	8	21
Green-winged teal	4	11
* subtotal *	56	148
<u>*Kickinghorse WPA</u>		
Mallard	28	74
Gadwall	13	34
Cinnamon teal	33	87
Blue-winged teal	12	32
Green-winged teal	3	8
Shoveler	17	45
Wigeon	5	13
Redhead	5	13
Lesser scaup	2	5
* subtotal *	118	312

Table VIII. 1992 Duck breeding pair counts and estimated production for Lake County WPA's (cont.)

Species	# Pairs	Production
<u>*Herak WPA</u>		
Mallard	12	32
Cinnamon teal	14	37
Shoveler	3	8
Gadwall	2	5
Redhead	5	13
Blue-winged teal	2	5
* subtotal *	38	101
<u>*Johnson WPA</u>		
Mallard	29	77
Gadwall	13	34
Cinnamon teal	19	50
Blue-winged teal	9	24
Green-winged teal	1	3
Shoveler	9	24
Redhead	7	19
Ring-necked duck	1	3
Wigeon	4	11
subtotal	92	245
<u>*Johnson 80 WPA*</u>		
Mallard	10	26
Cinnamon teal	1	3
Shoveler	2	5
Gadwall	4	11
Pintail	1	3
Redhead	14	37
Ring-necked duck	1	3
subtotal	33	87

Table VIII. 1992 Duck breeding pair counts and estimated production for Lake County WPA's (cont.)

Species	# Pairs	Production
<u>*Sandsmark WPA</u>		
Mallard	125	331
Pintail	4	11
Gadwall	11	29
Shoveler	27	71
Cinnamon teal	36	95
Blue-winged teal	2	5
Green-winged Teal	2	5
Redhead	13	34
Wigeon	3	8
* subtotal *	223	590
<u>*Duck Haven WPA</u>		
Mallard	21	56
Redhead	26	69
Shoveler	30	79
Cinnamon teal	40	106
Blue-winged teal	1	3
Gadwall	24	64
Wigeon	5	13
Pintail	3	8
Green-winged Teal	6	16
Ruddy duck	7	19
Lesser Scaup	1	3
* subtotal *	164	436
*** total ***	724	1921



Figure 15. Duck nest densities reached a nest per acre at Sandsmark WPA as a result of skunk control since 1988. Interesting findings included 2 Canada goose nests (above) and 12 redhead nests (below) found on uplands. Both goose nests and 7 of the redhead nests were successful.





Figure 16. Fences are a hazard to low flying birds such as this blue-winged teal.

4. Marsh and Water Birds

American bitterns, great blue herons, pied-billed grebes, eared grebes, and sora rails utilized the WPA's in Flathead County this year. Populations were monitored in conjunction with on-going field activities. Populations appeared to peak in early July.

The three "resident" pairs of sandhill cranes were observed again on Batavia WPA in April.



Figure 17. The cranes were observed throughout the summer on Batavia WPA; however, nesting wasn't documented and no young "colts" were observed.

5. Shorebirds, Gulls, Terns & Allied Species

Bird species in this group that were observed again this year on Flathead County WPA's included spotted sandpipers, lesser yellow-legs, Wilson's phalaropes, dowitchers, snipe, avocets, ring-billed, and California gulls. Long stretches of open shoreline on Flathead WPA attract hundreds of gulls each year. This year, approximately 900 of the birds were observed in late June. Several hundred California gulls were also observed on every trip to Smith Lake.

In Lake County, birds of this category counted during the duck pair counts included 7 American avocets, 2 black-necked stilts, 3 common snipes, 5 killdeer, 15 Wilson's phalaropes, 1 sora and 1 Virginia rail.

6. Raptors

Raptors that were common to Flathead County WPA's included: northern goshawk, northern harrier, red-tailed hawk, rough-legged hawk, Swainson's hawks, osprey, golden eagle, bald

eagle, great horned owl, short-eared owl, and kestrel. Nesting of short-eared owls and northern harriers was documented this year on Blasdel WPA.



Figure 18. Three short-eared owl nests and two northern harrier nests were found during this year's nest drag. Four of the five nests were successful, while the fifth one was abandoned; this success rate is surprising based on observed duck nest predation on the unit. RW 6/92

The first osprey sighting in Flathead County was in late March, approximately 2 weeks earlier than last year. Warm, spring-like weather was likely a factor in the early sighting. Flathead WPA continues to attract a number of these birds each year. The birds generally arrive in early spring from their wintering grounds in Central America and Mexico. The WPA offers ideal nesting conditions, with many cottonwood snags and tree stumps located in the delta area and lake shoreline used as nest sites each year; access to the lake provides an easy fish base for the birds. In 1992, there were 12 nests on the WPA; production was estimated at approximately 30 young.

Raptors recorded during duck pair counts on Lake County WPA's included 27 short-eared owls, 6 red-tailed hawks, 1 rough-legged hawk and 17 northern harriers. A goshawk was seen at Sandmark WPA in early November.

7. Other Migratory Birds

Washtak and Gelhar completed two mourning dove coo-count surveys again this year. The surveys were run in Flathead and Lincoln Counties. We had a minor increase in dove sightings this year (total of eight); normally only two-to-three doves are observed on both routes.

Random observations of mountain bluebirds increased this year. These beautiful birds were seen throughout the summer on every trip to the Batavia and Smith Lake area. Justin Paugh began voluntary monitoring of the nesting boxes at Smith Lake this year. Justin reported 6 of 13 boxes occupied; 40 eggs were laid and 32 hatched; the other 7 boxes were used by swallows.

8. Game Mammals

Whitetail deer were the most common big game animal observed on Flathead County WPA's this year. Aspen, willow, and cottonwood groves, as well as brushy areas on Batavia, Flathead, and Blasdel, continues to provide year-round habitat; sightings of does and fawns were common this year. Dense cattail stands along the shoreline of Flathead WPA also provided excellent winter habitat. Mountainous, forested units on Smith have been designated by the State as winter range for the whitetails. Exact populations using the WPA's are unknown, but may be as high as 100-150 animals.

In June, a raghorn bull elk, 2 cows and several calves were observed on Batavia on a regular basis; a cow moose and her calf were also observed on Smith Lake in July.

9. Other Resident Wildlife

Random observations indicated pheasant populations in Flathead County were down this year. However, crow counts conducted by State biologists in the "lower valley" area showed a relatively stable population compared to last year's figures.

11. Fishery Resources

As in past years, Smith Lake WPA continued to support an excellent population of yellow perch. The State of Montana is responsible for management of the fishery resource in the lake; no management was applied this year as the resource appears to be self-sustaining.

15. Animal Control

Predator control efforts on Flathead County WPA's were again directed at striped skunks on Blasdel WPA. Trapping was conducted from March 28 to July 12th. All trapping was done in conjunction with the on-going nest drag/predator control study on Lake County WPA's. In 1992, 41 skunks were caught in 1,383 trap nights for a catch rate of 2.96 skunks/100 trap nights. This was up 137 percent from last year's rate of 1.25 skunks/100 trap nights. Only live traps, baited with sardines were used. Skunks caught in DNC units accounted for 56 percent of the total; 14 skunks were caught in the vicinity of the barn; 4 skunks were trapped in native prairie units. Since our data is showing a continued decrease in duck production despite our predator control efforts no trapping will be carried out in 1993.

Each year the refuge office at Creston receives several complaints from local landowners concerning depredating waterfowl. Generally these complaints involve no more than a hundred geese which generally disperse from the croplands after a few days. However, in order to satisfy the concerned party, complaints are turned over to Animal Damage Control personnel in Stevensville, Montana even though it may be as long as a week before they can respond.

Predator control activities in Lake County are covered in Section D.5.

16. Marking and Banding

Duck Haven WPA was one of the banding sites in a cooperative effort with MTCWRU in banding a quota of 400 mallards. A total of 581 ducks, including 480 mallards, were banded. Immature birds comprised about 50 percent of the total. Late in the year, band returns were received from as far away as southern Idaho and California.



Figure 19. Duck banding at Duck Haven WPA was hampered by marauding dogs. Two pit bulls got into a trap and killed 27 ducks (above), including the only brood of canvasbacks known in the Ninepipe area (on the left). On another occasion, two other dogs did similar damage (below). This is an example of the problems that come with subdivision and development adjacent to wildlife areas. KF 8-92



H. PUBLIC USE

1. General

Public use activities on Flathead County WPA's included pheasant hunting, waterfowl hunting, fishing, trapping, bird watching, deer hunting, and occasional cross-country skiing. The high population base in and around the city of Kalispell results in a very high use of the areas. The northern part of the Flathead Valley "has been discovered". Many national news publications printed several articles about the "good life" which can be found in the area. In 1992, the Kalispell area continued to attract hundreds of new residents. As a result, both consumptive and non-consumptive uses will probably increase each year. State fishery biologists estimate fishing visits on Smith Lake alone account for over 8,000 visits each year.

2. Outdoor Classrooms-Students

In April, Assistant Manager Washtak guided about 25 enthusiastic 4th graders from Batavia elementary school on a waterfowl ID tour at Blasdel.

7. Other Interpretive Programs

Blasdel WPA was included in the local Audubon Club's annual "Christmas Bird Count Zone". Despite cold weather and heavy snow accumulations, the club observed a near record 154 species. Several raptor species, warblers and wrens were observed on the WPA.

8. Hunting

Flathead County

The 1992 duck and goose season opened on October 3. Car counts on all areas remained near last year's figures and success was only fair due to bluebird weather. Flathead and Smith Lake received the most pressure. In contrast to past years, hunters in private pit blinds adjacent to and immediately north of Flathead WPA bagged very few geese on opening day. Success improved as the season went on and freeze-up in late November pushed the birds to the Flathead River. Hunters who had access to the river continued to do well until the season closed on January 3.

In 1992, Montana FWP split the duck season into 3 openers again in response to hunter preference for extended late season hunting opportunities. Duck season opened on October 3. Near record drought conditions left the majority of north valley potholes dry and hunting pressure was limited to the more permanent basins, Flathead River, and the lake's shoreline areas. Blasdel WPA received almost no hunter use after the opener because of low water levels. Continued dry weather into early November did little to improve hunting conditions; weather fronts were lacking and the few rain showers we did receive did not move any significant numbers of birds to help hunter success. Snow and freezing conditions in late November pushed remaining birds south or to the river, essentially ending hunter use of the WPA's. Duck season closed for the year on January 3; hunt visits were estimated at 1,150, a 25 percent decline from 1991.

The 1992 pheasant season opened on October 17. Pheasant hunting was fair in the north end of the valley. The most popular area was a 7 by 9 mile area immediately north of Flathead Lake. This area is dominated by agricultural practices and includes both Flathead and Blasdel WPA's. Hunter use of the 2 units was down an estimated 30 percent compared to previous years. Blasdel WPA received the majority of use, with 20 cars counted in the parking lots at daylight on opening day (down from 34 in 1991). By noon only three birds had been checked. Poor hunter success and corresponding big game seasons the following week contributed to the decline in pheasant hunting activity this year.

Deer hunters continued their use of Flathead WPA this year. The WPA lies within a State designated whitetail doe hunting district and up to 3 doe tags could be purchased for either archery or rifle season. Because of this, the WPA remains a popular deer hunting area. Hunter visits were estimated at nearly the same as in 1991 (125). Several reports of harvested deer were received, but were not documented by refuge personnel.

In Lake County, hunting pressure was generally light during the duck and goose seasons, and hunter success was fair. Hunting pressure was heavy for the pheasant season opener, and slowed to light but sustained activity thereafter.

9. Fishing

As in past years, Smith Lake WPA continued as one of the most popular fishing spots for yellow perch in northwest Montana. The WPA received heavy use throughout the winter and summer months. The Montana FWP has estimated annual

fishing visits at over 8,000. Success varied with the time of the year. In 1992, April and September proved to be the "hot" months, with the size of perch ranging from 6-to-10 inches.

The local Lion's Club Annual December "Sunriser" Fishing Derby at Smith Lake was canceled this year because of cold weather conditions.

10. Trapping

Trapping is permitted on all WPA's in accordance with State regulations. Flathead, Batavia and Smith Lake had the most visits. Muskrats were the most abundant furbearer. One trapper on Batavia and Smith Lake reported "doing well" on mink this year; he did not even bother to trap muskrats because of low fur prices. When inquiries are received about trapping the WPA's, individuals are asked to voluntarily report their success; in 1992, only the "mink trapper" did and he did not have any actual counts readily available.

17. Law Enforcement

Assistant Manager Washtak conducted all patrol work in Flathead County again this year. As in past years, L.E. efforts were concentrated primarily on patrolling the WPA's during the waterfowl and pheasant seasons, investigating vehicle trespass on the lake's shoreline and pursuing reports of stray dogs harassing waterfowl. In 1992, a considerable number of man-days were spent on the stray dog issue. Complaints nearly tripled this year on Batavia and Flathead WPA's. Adjacent landowners were contacted in the Batavia area and warned of the consequences of letting their dogs run on the area. After this warning, we received very good compliance and no citations were issued.

On several occasions, State Wardens also patrolled the WPA's. Their assistance resulted in several citations for hunting in a closed area and over-bag. While hunting in November, Washtak observed a deer hunter poach a large 5-point buck near the hatchery complex. The individual was cited and received a \$515 fine and loss of his hunting and fishing privileges for 2 years.

On August 4, a 35-year-old Kalispell woman, fishing at Smith Lake, drowned when her float tube overturned. The drowning was investigated by the Sheriff's Department and determined to be accidental.

In February, Washtak attended the Smith and Wesson semi-automatic armorers training in Marana, Arizona as part of his Firearms Instructor responsibilities.

I. EQUIPMENT AND FACILITIES

1. New Construction

Fencing and posting of the 3-acre round-out on Smith Lake was completed in April.

2. Rehabilitation

Approximately 45 man-days were spent this year repairing boundary fences, H-braces and wire gates on Smith Lake, Batavia, and Flathead WPA's.

Other rehab projects included replacement of the lean-to shop doors at Creston, sealing the walk-through door on the Blasdel quonset building to prevent trespass, temporary repairs to the quonset building's sliding doors pending further repair in 1993, removal of one-quarter mile of deteriorated boundary fence on Blasdel, and replacement of one-half mile of old fence on Smith Lake Unit 12.

In Lake County, 1 mile of old fence was removed, 1 1/4 mile of new fence was built and a set of old farm buildings were burned down by the Charlo Fire Department, all at Johnson WPA.

4. Equipment Utilization and Replacement

A new 60 hp Volkswagen engine was installed on the 10' airboat at Creston. Initial test runs did not "plane" the boat out; as a result, a video of the boat's operation was made and sent to a dealer in Florida, along with the prop for his inspection and advice. A new prop has been ordered; hopefully, this will correct the problem.

New shop items purchased this year for use at Creston included a cutoff saw and a new 5-speed drill press.

Several small pieces of equipment were surplused this year; these included two 6-wheel ATV's, the Honda 110 ATV and two mobile radios. The items were either outdated or unserviceable.

J. OTHER ITEMS

Jon Malcolm continued to served on the Flathead Fish and Wildlife Advisory Board. Board members are from the Confederated Salish and Kootenai Tribes, Montana Department of Fish, Wildlife and Parks, and the USFWS. The members work together in establishing hunting and fishing regulations for non-tribal members on the Flathead Indian Reservation.

4. Credits

Assistant Manager Bill West wrote the draft of Sections C.1-2; D.2, 4, 5; E.2, 4, 6, 7 and F.2 for Lake County and provided information for some of the other Lake County sections. Jon Malcolm wrote the remaining Lake County sections and edited the entire report. Ray Washtak wrote the draft of all sections for Flathead County. Sharon Hooley and Sharol Birks of the Fish and Wildlife Center at Creston did the final proofing, word processing, printing and assembly.

K. FEEDBACK

This may not be the proper forum to express my thoughts, feelings and appreciation, but I want to take this opportunity to thank everyone, especially the folks in Region 6 for their support and encouragement this past year. It has been a difficult year both for myself and my family; battling cancer is not easy, but everyone's constant encouragement kept me going many times, especially on those bad days while I was undergoing treatment. I also want it to be known that two Service people were particularly helpful: one is my supervisor, Jon Malcolm, who expressed a lot of support ("don't worry about the job") and patience during my absences. I'd also like to acknowledge Sharol Birks and Sharon Hooley, the administrative assistants at the Creston office, who helped a great deal by handling administrative and clerical duties so I didn't get "too far behind". My thanks again to all for your prayers and support.

For other feedback, see the National Bison Range report.